

Before the
Federal Communications Commission (FCC)
Washington, D.C. 20554

In the Matter of:

Amendment of Part 2 of the
Commission's Rules to Allocate
Spectrum Below 3 GHz for Mobile
and Fixed Services to Support the
Introduction of New Advanced
Wireless Services, including Third
Generation Wireless Systems

ET Docket No. 00-258

Comments and Recommendations of
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RE: Relocation Procedures and Concerns for Broadband Radio Service (BRS)
Currently in the 2150-60/62 MHz Band

To Chairman Martin, Commissioner Copps, Commissioner Adelstein,
Commissioner Tate, and all those concerned:

As a law student in Los Angeles currently enrolled in a Communications Law class, I have been increasingly aware of new FCC developments. As an avid technology enthusiast, I am pleased to learn that the FCC is attempting to catapult the United States up to the level of much of the rest of the world by allocating spectrum to Advanced Wireless Systems (AWS).

This comment is designed to address some thoughts and concerns I have about the proposed relocation procedures for Broadband Radio Service (BRS) in

the 2150-2160/62 MHz band proposed by the FCC in the *Eighth Report and Order, Fifth Notice of Proposed Rule Making and Order* (“*Eighth Report*”)¹.

1. Background.

For approximately the past five years, the FCC has been interested in reallocating spectrum to AWS. According to an FCC news release, AWS “...could provide a wide range of voice, data and broadband services to the public over a variety of mobile and fixed networks.”² The ramifications and possibilities of this potential are not even fully comprehended today.

Much of Europe already utilizes Third Generation Wireless Systems (a type of AWS) for internet service through cellular telephones.³ With Third Generation Wireless Systems in the United States, a new and valid competitor to broadband DSL and cable internet providers could enter the market, thus providing an incentive to existing providers to supply internet services at a lower price and with better customer service. Internet could be available across virtually the entire nation, and we would no longer be tethered by Ethernet cables to local area networks or to wireless local area networks.

Moreover, new and emerging technologies will now be viable with spectrum allocated for AWS, such as internet radio receivers in cars, and truly mobile high-speed internet terminals that can be taken anywhere in the US.

¹ *Eighth Report and Order, Fifth Notice of Proposed Rulemaking*, ET Docket No. 00-258 (Sept., 2005).

² FCC News Release, Jan. 4, 2001. “FCC Looks to Allocate Additional Spectrum for New Advanced Wireless Systems.” ET Docket No. 00-258.

³ See, for example, <http://www.thecloud.net/> (England’s leading WiFi internet supplier).

Because of these emerging technologies and opportunities the United States will face through them, there is no question of the importance of this spectrum allocation. However, as with any spectrum reallocation, there are myriad competing interests the FCC must take into account. This comment will discuss the AWS licenses that will effectively displace licenses that are currently held by BRS licensees⁴.

2. It is Infeasible for the FCC to Require “Comparable Facilities” for Primary BRS Licensees in Relocation.

Upon reallocation, the FCC proposes to require new AWS Licensees to relocate the incumbent BRS licensees into “comparable facilities.” The FCC has imposed 3 requirements: (1) same throughput; (2) same reliability; (3) same operating costs⁵. This proposal wants for much more clarity and some sort of bright-line principles. I do not believe this is a feasible requirement for several reasons which I will discuss in this section and the following section.

The FCC’s *Eighth Report* discusses the possibility that “comparable facilities can be provided by *upgrading equipment* to digital technology and making use of efficient modulation and coding techniques.”⁶ This statement in fact recognizes that “comparable facilities” are inherently impossible to create in a reallocation such as this one. While upgrading to digital equipment might be a welcome change for BRS licensees and might even make their operations more

⁴ For a listing of spectrum uses in the proposed AWS spectrum allocation, *see* http://www.jneuhaus.com/fccindex/960_mhz.html#footer.

⁵ *Eighth Report and Order, Fifth Notice of Proposed Rulemaking*, ET Docket No. 00-258 (Sept., 2005) at p. 10, ¶16.

⁶ *Id* at p. 10, ¶16 (emphasis added).

efficient and profitable, an upgraded system is not a “comparable facility.” There is absolutely no reason why a new AWS licensee should have to pay for an *upgrade* to a BRS licensee’s equipment and operations.

Changes between frequencies and especially from analog to digital broadcasts involve huge capital investments, and often a large surge in electricity costs. Because of this, it is clear that there is no true “comparable facility” that a new AWS licensee could insert a BRS licensee into.

Further, because “comparable facilities” are not always going to exist, the FCC has allowed for a “right of return” for BRS licensees, which would effectively allow them to “...return to the old frequency band or otherwise be relocated or reimbursed.”⁷ This right would impose an even greater burden on new AWS licensees, because it is foreseeable that a BRS licensee would argue that nothing the AWS licensee did was comparable, so even after working to provide comparable facilities, an AWS licensee would not be guaranteed to truly occupy spectrum without competing interests.

3. The FCC Should Not Enforce a Subsidy Requirement on New AWS Licensees.

Economically, whenever a new use is proposed for a used part of the spectrum, consideration must be given to which use is more efficient, and which use contributes more to the public welfare. However, the FCC’s purpose for its

⁷ *Id* at p. 15, ¶25.

licensing scheme must be retained. In NBC v. US⁸, the Supreme Court upheld licensing powers of the FCC for radio broadcasters, stating:

The language of the [Communications Act of 1934] does not withdraw [a situation of interference between broadcasters] from the licensing and regulatory powers of the [FCC], and there is no evidence that Congress did not mean its broad language to carry the authority it expresses⁹.

However, the FCC's licensing scheme does far more than merely alleviate interference between broadcasters. One major byproduct of the licensing scheme has been a piece of mind held by licensees to spend sometimes exorbitant amounts of money investing in equipment, infrastructure, programming, etc, because licensees are assured the ability to utilize their investments for a certain amount of time. For example, ABC (the American Broadcasting Company) was estimated to be broadcast to 96.75% of American households in 2003¹⁰. Without a license granted to each affiliate station, the equipment, personnel, and technology necessary to broadcast ABC to almost the entire country would not have been purchased and/or funded because each affiliate station would have no assurance of a set length of time their investment could be put to work.

Therefore, it is clear that existing BRS licenses cannot merely be revoked to make space for AWS. If this were to happen, there would be uncertainty in the telecommunications industry, which could potentially lead to a halt in investment in new technologies. As discussed *supra*, the FCC's *Eighth Notice* proposes that

⁸ NBC v. US (1943) 319 U.S. 190.

⁹ *Id* at 218.

¹⁰ www.Wikipedia.com, "American Broadcasting Company".

AWS licensees should be required to provide comparable facilities to incumbent BRS licensees.¹¹

It is a well-established tenet of economics (and I presume the FCC's view) that in a free marketplace, limited resources will shift to the most efficient use. The telecommunications industry is no exception - the better-suited use of the limited resource of spectrum should take over. Therefore, if AWS is a better use of spectrum than BRS, then it should naturally be able to utilize the spectrum currently allocated to BRS. The FCC proposal effectively allows AWS to subsidize the BRS' relocation, which is arguably the equivalent of purchasing a limited resource for a more effective use. If an AWS licensee cannot afford to relocate a BRS, then the BRS is arguably more profitable and therefore arguably a more efficient user of spectrum than the new AWS licenses.

However, there are a few fundamental flaws in this reasoning. First, AWS is an emerging technology in the United States, and has been classified as such by the FCC¹². As with any new technology, AWS licensees will not generate revenue and customers overnight. It might take up to several years for the allocated spectrum to be put to use by commercially-viable technologies, so upon reallocation, the BRS will still be a more effective use of spectrum economically; AWS licensees, unless large, existing corporations, will not have the resources to relocate large BRS licensees.

¹¹ *Eighth Report and Order, Fifth Notice of Proposed Rulemaking*, ET Docket No. 00-258 (Sept., 2005) at p. 15, ¶25.

¹² *See Emerging Technologies First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd at 6889-90, ¶ 21.

Second, this proposal does not fully take into account the FCC's obligations delineated by Congress. The lengthy Communications Act of 1934¹³, which established the FCC, states throughout that the FCC is charged with regulating "...as public convenience, interest, or necessity requires."¹⁴ While it may be in the public interest to allow licenses to remain for their full duration as discussed *supra*, it is also in the public interest to allow new and emerging technologies that will serve a greater public interest in the future to develop and grow. AWS licensees may have an arduous road ahead of them in economic terms, as many people may initially be reluctant to adopt these new technologies. Therefore, AWS licensees should not have to subsidize the relocation of BRS licensees. If anything, AWS licensees should perhaps be subsidized to develop new and emerging technologies that will propel our country into a new technological age.

Third, although it is difficult to forecast at this point who the new AWS licensees will be, it is not unforeseeable that a non-profit or public-interest organization will attempt to obtain an AWS license. For example, organizations may emerge who wish to broadcast utilize this spectrum for low-income families to access the internet. With the FCC's proposed reallocation regime, these AWS licensees would be responsible for relocating the BRS licensees they displace, something that would clearly not be possible for a smaller non-profit or public-interest organization to undertake.

¹³ *Communications Act of 1934*, 47 U.S.C.A. §§ 151 et seq. (1934).

¹⁴ *See for example* 47 U.S.C.A. § 303.

4. My Reallocation Proposal

Instead of a FCC-forced subsidy from new AWS licensees for the BRS licensee's relocation, I propose to allow for expiration of current BRS licenses that are set to expire before 2008. Once these licenses have expired, AWS licensees will be able to use that spectrum, and the incumbent BRS licensees will make their own decisions on whether to invest in upgraded equipment and reallocate themselves. While the FCC's licensing scheme may create stability in licensee's investments for a period of time, they are not permanent, and any BRS licensee knew of the lack of permanency when initially investing in its operation – every BRS licensee realized that licenses expire and that there is no guarantee of permanency.

As for BRS licenses that do not expire for several more years, I would propose an optional negotiation, similar to the FCC's proposal discussed in the *Eighth Notice*¹⁵. My negotiation, however, will differ from the FCC's proposal because it will involve a one-time license buy-out, the price of which is to be negotiated between the BRS licensee and the AWS licensee. The BRS licensee will negotiate this price taking into consideration the value it attributes to its license, its ability to relocate, and its ability to continue operation. The AWS licensee will negotiate this price taking into consideration its forecasted revenue from operating in the allocated spectrum. The AWS licensee will be under no mandate to relocate or subsidize the BRS licensee, and the BRS licensee will

¹⁵ *Eighth Report and Order, Fifth Notice of Proposed Rulemaking*, ET Docket No. 00-258 (Sept., 2005) at page 15, ¶¶ 24-25

have no “right of return” as proposed in the *Eighth Report*¹⁶. Such a “right of return” brings with it a highly foreseeable batch of lawsuits to determine whether an AWS licensee has in fact provided comparable facilities to the incumbent BRS licensee, since “comparable facilities” will be so difficult to provide, as discussed *supra*.

Further, I propose a secondary license for any AWS licensee that doesn’t see profit in its immediate future sufficient to pay for the BRS license buy-out, or an AWS licensee that cannot obtain adequate financing up front to fund the buy-out. The license would remain secondary until the incumbent BRS licensee’s license expired. This would allow AWS licensees to, at the minimum, obtain a license for the spectrum and develop technology. Funding will be more forthcoming with a guaranteed spectrum allotment, even if not usable for a few years.

If no agreement can be reached between the AWS licensee and the incumbent BRS licensee, the AWS licensee can simply await the expiration of the BRS licensee’s license, and it will at least hold a secondary license. In the mean time, for spectrum not licensed to AWS licensees, I propose to award secondary licenses to willing BRS licensees. Since secondary licenses by definition allow licensees to utilize spectrum up to the point of causing interference to a primary licensee, there would be no problem with reallocation of the spectrum once an AWS licensee enters the area. The BRS licensee would have obtained the secondary license knowing that at any time, it would be secondary to an AWS licensee.

¹⁶ *Id* at p. 15, ¶25.

Also, most BRS licensees cover vast geographical regions in a point-to-multipoint set-up. Since most AWS licensees will be geographically smaller, using a point-to-point network, a new AWS licensee might potentially only occupy a small region of an incumbent BRS' broadcast region. Under the FCC's proposed relocation regime, it would be exceedingly difficult for an AWS licensee to relocate a BRS licensee when it only encroaches on a fraction of the BRS' geographic territory. Under my proposal, the AWS licensee would negotiate a buyout price with the BRS that only contemplates the fraction of the BRS' territory that the AWS would occupy.

Using this voluntary negotiation scheme poses a few problems, however. Under this regime, incumbent BRS licensees might have little incentive to negotiate a buy-out price with an AWS licensee. However, this is unlikely, since a BRS licensee that realizes a definite end to its license is looming might be under more pressure to profit from the remaining term of its license. If the licensee knows for certain that no renewal is in its future, it has even more incentive to bargain and make some profit off the license it holds presently.

Also, simply awaiting the expiration of BRS licenses may not appear to be the most efficient reallocation strategy, especially with newly emerging technology that could potentially revolutionize the United States' telecommunications industry. However, under my proposal, it is not mandatory that BRS licenses are left intact. Since AWS licensees would have the option to buy out the BRS licenses, the economic best-use theory would posit that a more

efficient and profitable user such as an AWS licensee would simply buy out the less efficient BRS licensee before its license ran out.

5. Conclusion.

It is not debated that AWS licensees will provide this country with new technologies that will enhance our daily lives and propel our population into the future. We have only begun to delve into the technologies that will be permitted with this spectrum allocation.

However, under a forced subsidy the FCC would impose, new AWS licensees would be required to relocate existing BRS licensees at a very large expense, almost certainly before turning profits from using their allocated spectrum. This relocation would sometimes be almost impossible to administer in situations where “comparable facilities” are not available, or where extremely costly upgrades are required. The FCC would even allow for a right of return for BRS licensees who are deemed not to have been accommodated in comparable facilities under this regime.

Therefore, under my proposal, while possibly more time-consuming, AWS licensees will possess more freedom to pursue and develop newly emerging technologies with their funding, instead of having to negotiate a relocation strategy with incumbent BRS licensees and paying for the same. The proposal is flexible, allowing for a voluntary buyout if time is important to AWS licensees.

This proposal will allow AWS licensees the economic and administrative freedom they desperately need to develop, market, and apply new technologies that will guide the United States into a bright new future.

Respectfully Submitted:

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April 27, 2006